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Art Unit: 2654

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended) A method of document expansion for a speech retrieval document by a recognizer, comprising the steps of:

accessing a database of vectors of automatic transcriptions of documents;

truncating the vectors by removing all terms in the vectors that are not recognized by the recognizer, thereby creating truncated vectors;

changing weights of terms in the truncated vectors to weights associated with the vectors before the vectors were truncated ~~to form the truncated vectors~~, thereby creating truncated, weighted vectors; and

adding to the truncated, weighted vectors any terms which were not recognized by the recognizer.

2.   (Original) The method recited in claim 1, further comprising the step of comparing from the truncated vectors a retrieval of documents from the original vectors, thereby measuring effect of deletions from the original vectors on retrieval accuracy.

3.   (Original) The method recited in claim 1, further comprising the step of measuring incremental loss in retrieval effectiveness due to insertion of the terms not recognized by the recognizer.

4.   (Original) The method recited in claim 3, further comprising the step of determining final retrieval effectiveness of the speech retrieval document using automatic transcriptions.

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5.   (Original) The method recited in claim 4, wherein the accessing step comprises the

step of querying the database with the speech retrieval document to retrieve documents that

are similar to each other.

6.   (Original) The method recited in claim 5, wherein the querying step comprises

retrieving a predetermined number of documents which are most similar to the speech

retrieval document.

7.   (Original) The method recited in claim 6, wherein the predetermined number is ten.

8.   (Original) The method recited in claim 6, wherein the truncating step comprises the

step of modifying the original vectors according to a weighting function to produce the

truncated vectors.

9.   (Previously Presented) The method recited in claim 8, wherein the weighting function

comprises a function of the following form:

$$\bar{D}new = \alpha \bar{D}old + \frac{\sum\limits_{I=i}^{10} Di}{10}$$

where $\bar{D}old$ is an initial document vector, $\bar{D}i$ is a vector for an i-th related document, $\bar{D}new$

is a modified document vector, and α is a value.

10.   (Currently Amended) A system for document expansion of a speech retrieval

document for a recognizer, comprising:

        a database of vectors of automatic transcriptions of documents; and

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a processor in data communication with the database of vectors for truncating the

vectors by removing all terms in the vectors that are not recognized by the recognizer,

thereby creating truncated vectors, changing weights of terms in the truncated vectors to

weights associated with the vectors before the vectors were truncated ~~to form the truncated~~

~~vectors~~, thereby creating truncated, weighted vectors, and adding to the truncated, weighted

vectors any terms which were not recognized by the recognizer.

11.   (Original) The system recited in claim 10, wherein the processor is further operable

to compare from the truncated vectors a retrieval of documents from the original vectors,

thereby measuring effect of deletions from the original vectors on retrieval accuracy.

12.   (Original) The system recited in claim 10, wherein the processor is further operable

to measure incremental loss in retrieval effectiveness due to insertion of the terms not

recognized by the recognizer.

13.   (Original) The system recited in claim 12, wherein the processor is further operable

to determine final retrieval effectiveness of the speech retrieval document using automatic

transcriptions.

14.   (previously presented) The system recited in claim 13, wherein the processor is

further adapted to retrieve documents that are similar to each other during querying.

15.   (Original) The system recited in claim 14, wherein during querying of the database

by the processor, a predetermined number of documents are retrieved which are most similar

to the speech retrieval document.

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16.   (Original) The system recited in claim 15, wherein the predetermined number is ten.

17.   (previously presented) The system recited in claim 15, wherein during truncating the

original vectors are modified according to a weighting function to produce the truncated

vectors.

18.   (previously presented) A machine-readable medium having instructions for a

processor recorded therein, the machine-readable medium comprising:

        instructions for accessing a plurality of vectors of transcriptions of documents; and

        instructions for removing terms in the vectors that are not recognized by a speech

recognizer, thereby creating truncated vectors.

19.   (Previously Presented) The machine-readable medium of claim 18, further

comprising:

        instructions for changing weights of terms in the truncated vectors to weights

associated with the vectors before truncation, thereby creating truncated, weighted vectors.

20.   (Previously Presented) The machine-readable medium of claim 19, further

comprising:

        adding to the truncated, weighted vectors terms which are not recognized by the

speech recognizer.

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